The
Closed Landfill Inventory
for the

# South Plains Association of Governments

Prepared by the

*Southwest Texas State University*
*Department of Geography*
*Closed Landfill Inventory Team*

| Bailey | Lamb | Hale | Floyd | Motley | |
|--------|------|------|-------|--------|---|
| Cochran | Hockley | Lubbock | Crosby | Dickens | King |
| Yoakum | Terry | Lynn | Garza | | |

Counties of:

**Bailey**

**Cochran**

**Crosby**

**Dickens**

**Floyd**

**Garza**

**Book 1 of 5**

The materials presented herein are in fulfillment of the contract obligations of Southwest Texas State University Department of Geography Closed Landfill Inventory Team to the South Plains Association of Governments (SPAG). These materials are a required component of the SPAG Regional Solid Waste Management Plan.

Date of Adoption: _____

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**South Plains**
**Association of Governments**

Closed Landfill Inventory

● Permapp Site

▲ UNUM Site

⊙ County Seat

# HOW TO USE THIS NOTEBOOK

In this notebook you will find the results of research into the closed landfills in the South Plains Association of Governments region. The notebook is organized by county, and within each county by PERMAPP site (from PERMit APPlication) and then by UNUM site (from Unauthorized NUMber). PERMAPP sites include those recognized as a municipal solid waste landfill and assigned a number by the state. They include landfills that operated under a state permit, landfills that were in operation prior to permitting requirements and were assigned a number under grandfather provisions, and closed landfills that were assigned a number by the state. UNUMs include those sites that were recognized by individuals, local officials, private companies, state inspectors, and/or others as a landfill. They may have been publicly or privately operated and must be greater than ¼ acre in size. Both PERMAPP and UNUM sites are organized numerically. Some UNUM sites will have an SWT number only, some will have an SWT number and a Texas Department of Health (TDH) or Texas Natural Resources Conservation Commission (TNRCC) inspection number, and some will have only an inspection number. The SWT number or those sites with both identifying numbers will come before those sites with only an inspection number.

Each site will first have a datasheet summarizing essential information. Next there will be a map and various attachments. The datasheet is a report form produced using Microsoft Access database software. The maps are produced by ArcView GIS Version 3.2. If exact boundaries of the site are not available and a shape file can not be generated, the site will usually be indicated by a circle on the map. If the size of the site is unknown there will be a notice to this effect in the "Comments" and/or "Size" sections of the summary datasheet. The database and maps are available in digital form on a CDRom included with this notebook. To use the database you will need Microsoft Access 97 or later, and to view the maps you will need ArcView GIS 3.2a or later. For maximum map detail, open the digital map files and use the "Zoom" function.

### PERMAPP datasheets will have the following information:

☐ Permit Number and whether or not there was an amendment.
☐ Council of Government (COG) name and COG number
☐ County name and county number
☐ The **type** of facility; identifies the facility type according to the method of processing or disposal of municipal solid waste:
  - 1 – sanitary landfill, daily cover required
  - 2 – sanitary landfill, weekly cover required
  - 3 – sanitary landfill, monthly cover required
  - 4 – sanitary landfill for brush and/or construction-demolition material, monthly cover required
☐ **Site status**; indicates the condition of the site at the time the permit application was received:
  - GF - grandfather site (in operation prior to 1974)
  - NL - new license (county licensed sites)
  - OK – previously approved site (all amendments)
  - PS – proposed site (permit has not been issued before for this site)
  - RL – renewal license (for county license – no longer used)

- XX – unauthorized/non-permitted site (30,000 series- transferred to enforcement)
- XS – illegal sludge disposal site (transferred to watershed management)
☐ **Permit status**, e.g. submitted, denied, issued, etc.:
  - A – application submitted
  - B – application administratively complete
  - C – application technically complete
  - D – application denied
  - E – application in public hearing
  - F – application in final processing
  - G – grandfathered site – application submitted
  - I – permit issued
  - J – application or permit combined with another permit
  - K – site closed, no permit issued (GF site)
  - Q – site closed, permit issued
  - R – registered site (type 7 to watershed management)
  - W – application withdrawn
  - X – permit voluntarily cancelled prior to opening date
  - Z – permit revoked
  - AP – application submitted, post-closure care on partial site (GF site)
  - AK – application submitted, site partially closed (GF site)
  - CT – site closed to waste (final cover in progress)
  - DK – application denied, site closed (GF site)
  - IP – permit issued, post-closure care on part of site
  - IQ – permit issued, site partially closed
  - PC – site under post closure care (30 years)
☐ **Reply**: Response to TNRCC mail-out as of November, 2000
  - E - Expired permit (includes category 4-A)
  - VR – Voluntary revocation request returned
  - INA – inactive status requested
  - PNW – site is permitted but has never accepted waste
  - NR – no response
  - PC – site is in 5 year post-closure care
  - PCR – Post-closure period extended due to non-compliance/remediation
  - FOP – F.O.D. inspection required (Category 4-B)
  - NPC – Site has not entered the post-closure maintenance period (Category 5)
☐ **Near City**: city closest to landfill
☐ **Population Served**: total number of population served by the facility
☐ **Ton-Yd per Day**: estimated tons or yards per day at the time permit application submitted
☐ **Record Date**: date the permit application or amendment received in the TNRCC MSW Permits Section
☐ **Opening Date**: Date landfill opened
☐ **Closing Date**: Date landfill closed

- ☐ **Shape File**: We will either have a shape file for the permitted area, the closed area, or both. "No" indicates a shape file is not available, and the site will usually be indicated by a circle on the map unless a shape can be approximated using aerial photos, topo maps, or some other method.
- ☐ **Location Confidence**: the estimated accuracy of our location based on all data analyzed. The highest level of confidence is "within 20 meters" which means the latitude/longitude is within 20 meters of a site's point-of-beginning as indicated in its legal description, or within 20 meters of a site's center if no shape file is possible.
- ☐ **Affidavit**: Yes indicates an Affidavit of Closure exists.
- ☐ **Certified**: Yes indicates the Affidavit of Closure was recorded, and a certified copy may be obtained at the County Clerk's office.
- ☐ **Volume-Page**: the volume and page numbers at the County Clerk's office where the recorded Affidavit of Closure is located
- ☐ **Date Filed**: the date the Affidavit of Closure was recorded
- ☐ **Acres Permitted**: the number of acres included in the permit
- ☐ **Acres Closed**: the number of acres closed
- ☐ **Comments**: This section can contain a narrative location description, whether or not hazardous wastes may have been received, or any other information deemed important but not entered elsewhere in the database.
- ☐ **Past Owner**: the owner at the time of permitting or at the time the Affidavit of Closure was filed
- ☐ **Current Owner(s)**: the current owner of record per Central Appraisal District (CAD) data, secondary sources, interviews, deed records or site visits
- ☐ **Legal Description**: Legal description obtained using CAD data, deeds, secondary information, General Land Office maps. CAD account number is included if known.
- ☐ **Current Land Use**: a description of the current land use of the site based on site visits, interviews, CAD information or State Property Tax Division land use categories.
- ☐ **Lat-Long**: the latitude and longitude of the point of beginning of the legal description(s) of the site or the center of the site if a legal description or shape file is not available.
- ☐ **POB**: the point on the shape file where the point-of-beginning is located, or the center of the site if a legal description or shape file is not available. Abbreviations are used: NEC = North East Corner, SWC = South West Corner, NS = North Side, etc.
- ☐ **Attachments**: Items included in the notebook; can include shape drawings (MapDraw), deeds, area or site plats, closure affidavits, aerial photos, CAD print outs, etc. The shape drawings were generated using MapDraw software, a trial version of which can be downloaded off the Internet. By entering survey calls, the software will generate an outline of the site and calculate its perimeter, area, and gap. Aerial photos not obtained in the field were usually adapted from the *Terraserver* website. In these photos North is always toward the heading at the top of the page. All documents deemed relevant to identifying and locating a site or to its history are included as attachments regardless of their quality. Some may be difficult to read or lack detail but were used by the CLI team in building the inventory.

<u>UNUM datasheets will have the following information:</u>
- ☐ COG name and COG number
- ☐ County name and county number
- ☐ **UNUM Number**: the number assigned by SWT CLI team

- ☐ **Inspection Number**: the TDH or TNRCC inspection number (30,000 series). Some sites will have both an UNUM Number and an Inspection Number if the CLI Team determined that they are actually the same site.
- ☐ **Include**: "Yes" indicates the site is included in the inventory. "No" indicates the site is not included in the inventory.
- ☐ **Shape File**: "Yes" indicates a shape file is available. "No" indicates a shape file is not available. Most UNUM sites will not have a shape file.
- ☐ **Location Confidence**: same as Location Confidence for PERMAPP sites.
- ☐ **Size**: the estimated size in acres of the site based on inspection reports, deeds, aerial photos, etc.
- ☐ **Comments**: Information on how site location, history, whether the site received hazardous waste, or any other information deemed important but not entered elsewhere in the database.
- ☐ **Source**: The primary source(s) of information about the site.
- ☐ **Site Name**: Alternate or local name of site.
- ☐ **Past Owner(s)**: the owner at the time of permitting or at the time the Affidavit of Closure was filed
- ☐ **Current Owner(s)**: the current owner of record per Central Appraisal District data, secondary sources, interviews, deed records or site visits
- ☐ **Legal Description**: Legal description obtained using CAD data, deeds, secondary information, General Land Office maps. CAD account number is included if known.
- ☐ **Current Land Use**: a description of the current land use of the site based on site visits, interviews, CAD information or State Property Tax Division land use categories.
- ☐ **Lat-Long**: the latitude and longitude of the point of beginning of the legal description(s) of the site or the center of the site if a legal description s not available.
- ☐ **POB**: the point on the shape file where the point-of beginning is located, or the center of the approximate location if no shape file is available. Abbreviations are used: NEC = North East Corner, SWC = South West Corner, NS = North Side, etc.
- ☐ **Attachments**: Items included in the notebook; same as for PERMAPPs.

# EXECUTIVE SUMMARY
## Completion of the Closed Landfill Inventory (CLI) for the
## South Plains Association of Governments

**THE AGREEMENT** to complete the work was entered into by and between the South Plains Association of Governments (SPAG), an agency or political subdivision of the state of Texas, and Southwest Texas State University Department of Geography (SWTSU), an agency or political subdivision of the state of Texas. The agreement was entered into pursuant to the authority granted and in compliance with applicable provisions of the Interagency Cooperation Act, Tex. Gov't. Code Ch. 771 and Intergovernmental Cooperation Act, Tex. Gov't. Code Ch. 791.

This contract began on June 1, 2000, and shall terminate on full performance, which is due on August 31, 2001, unless terminated early or extended in accordance with the terms of the Contract.

## SCOPE OF WORK
### PURPOSE
Under Texas Health & Safety Code, regional waste management plans prepared and maintained by the Councils of Governments (COGs) are required to include an inventory of closed municipal solid waste landfill units (the Closed Landfill Inventory or CLI). This inventory must include the location of such units, the current owners of the land on which the former landfill units were located, and the current use of the land. The exact boundaries of each former landfill unit, or the best approximation of each unit's boundaries, must be inventoried, mapped and deed-recorded by the county clerk. Where exact boundaries of a former landfill unit are known, the COG shall also notify the owner of the land of its former use. Such records shall be made available for public inspection at the office of the county clerk.

### OBJECTIVE
SWTSU has completed the Closed Landfill Inventory (CLI) for the South Plains Association of Governments (SPAG), a region that includes twelve counties, 73 permitted units (77 minus 4 duplicates), and 74 unpermitted units (88 minus 10 sites that were actually permitted sites and 4 duplicates).

### TASKS (PHASES)
#### Phase I: Data Verification
THE SWTSU CLI TEAM reviewed existing data at Southwest Texas State University, verified the accuracy and reliability of all records and maps, added any required updates to existing databases and maps, and determined the need for any additional information required to complete the CLI for the SPAG.

It was estimated that Phase I should take no longer than two months to complete, but time frames for the different phases of the CLI are not independent or unique time allocations, but rather may overlap. THE SWTSU CLI TEAM typically did not wait until a phase was complete before commencing work on the next phase. THE SWTSU CLI TEAM provided a progress report to SPAG at completion of Phase I.

#### Phase II: Collection of Additional Data
SWTSU did: develop procedures to collect any required additional information and develop a data recording form for said information; locate and record information from all previously known sources; search for any additional sources that are necessary for the completion of the CLI and establish a schedule to collect this information; review and copy relevant files at data sources, and, as necessary, interview local official(s) with knowledge of closed landfills. SWTSU then determined and recorded current land owners and land uses of any parcels included in the CLI.

Phase II took approximately eight months to complete. SWTSU provided a progress report to SPAG at completion of Phase II.

#### Phase III: Data Processing & Analysis
SWTSU did: organize and enter data into new Access database; verify the quality of the data and determine the confidence level of the data for its sufficiency and accuracy for exact boundaries or approximate boundaries; and organize data where appropriate into an approved, recordable format.

Phase III took approximately six months to complete. SWTSU provided a progress report to SPAG at completion of Phase III.

**Phase IV: Field Verification**

Where needed, SWTSU did field-verify data using site visits, more intensive interviews and data investigation as warranted. SWTSU determined confidence levels, and entered corrections and new information into database

Phase IV took approximately three months to complete. SWTSU provided a progress report to SPAG at completion of Phase IV.

**Phase V: Data Mapping / Attribute Files – Completion of Draft Inventory**

Based on available data, maps, and points of beginning (POBs), SWTSU used ArcView and ARC/INFO techniques such as MAPDRAW and the COGO process to develop a Geographic Information System (GIS) that accurately locates and maps the true geographic location and shape files (boundaries) of closed landfills.

Phase V took approximately six months to complete.

**Phase VI: Update & Presentation**

SWTSU will elicit review input from the SPAG staff, and SPAG Solid Waste Management Committee and the TNRCC in order to complete the CLI to their satisfaction. SWTSU will keep personnel updated, and give a presentation to local government officials in concert with SPAG staff. Finally SWTSU will verify with SPAG that all deliverables are provided.

Deliverables include:
1. Progress reports to SPAG staff at end of each phase.
2. For all exact and approximate closed municipal landfill boundaries, hard-copy maps and digital image files for each map in ArcView for all permitted (PERMAPP) sites and unpermitted (UNUM) sites are included. We will work with SPAG staff to determine whether enough information is available to certify that the exact boundaries can be identified for a particular site. Such determinations are based on the following information:
   - A certified metes and bounds description that has been publicly filed and is available, such as found in an affidavit of closure;
   - Certified engineering drawings and/or other certified surveys of the final landfill site and are available in the records; or
   - A new survey that has been conducted by SPAG or other entity, preferably based on actual geographic coordinates. Where feasible, GPS can be used to identify POBs and unit boundaries.
3. For exact boundaries, a description of the exact boundaries of former landfill units (coordinate data within 20 meter accuracy), affidavits-of-closure, legal descriptions, plats. Maps for exact/known data as well as approximate boundaries are provided.
4. Basic identifying information for PERMAPP, UNUM and previously unidentified sites are sorted by county. Information includes:
   a. Site number
   b. Land use
   c. Explanation of confidence of location and boundary information
   d. Narrative location description
   e. Current land ownership (if known).
5. If exact boundaries are not known, a description of the approximate boundaries of the former landfill units (boundaries of land tracts) is provided. For these approximate boundaries, any available identifying information, to include plats and legal descriptions, is also provided. Maps of the landfill boundaries show the best approximation of location and boundary lines for the landfill in relation to identifying physical or geographic features, such as roads, waterways and lakes, rail lines, and/or other features. The maps prepared for the inventory indicate the boundaries and identification numbers of affected land tracts (i.e., basic land units - block, tract, parcel, etc.), as well as any available information on the geographic coordinates of the site and the

landfill boundaries.

6. A line or cross-hatched lines will be used to indicate the boundaries of a landfill that cannot be accurately placed on a map. Maps identify the centers of the approximate locations of such sites.

7. If known, names of the current landowners of the land on which the former landfill unit is located, and a description of the current use of the land are noted.

8. Using standard cartographic protocol, each map includes:
   - Title block, identifying county and landfill number
   - Block with map scale, orientation, SPAG name, and date of preparation
   - Sufficient geographic and physical reference features (i.e., roads, streams, political boundaries, etc.)
   - Closed landfill unit boundaries (noted as exact or approximate)
   - Applicable basic land units, such as land tracts and identification numbers (as available and/or on accompanying data sheets).

9. We have determined the ownership of the land where exact boundaries are available.

10. Land use information is provided in descriptive terms as recommended by the TNRCC.

11. All hard copy maps, attribute files, and supporting information are be provided in a loose-leaf three-ring binder to allow for additions and changes to the regional inventory as needed. The inventory includes a cover or title sheet, and a table of contents and the sites included in the inventory. The cover sheet refers to the inventory as a required component of the Regional Solid Waste Management Plan and includes a space for entering the date of adoption. The information is be sorted by county, with tabs separating the forms for each county.

12. The inventory includes this executive summary, describing the legislative requirements and the inventory procedures and methodologies. The inventory includes a map of the SPAG region with point locations of all sites by county.

13. All maps and supporting information are submitted on 8 ½ x 11 sheets or 11 x 14 or 11 x 17 sheets properly folded and inserted into the binder. In addition to paper copies, we have provided an electronic version of the inventory, including maps.

14. Where available, information about the history of the site is presented. This can include previous ownership, dates of operation, enforcement history, and types of waste disposed of at the site.

15. A narrative explanation of the confidence level in the location and boundary information is provided

16. Where it can be determined and documented with certainty that a landfill never existed or that all materials have been removed from that site, we provide sufficient information to explain why the site should be removed from the inventory database.

17. Where available, copies of affidavits of closure, site photos, other maps, and other appropriate information related to each site are included.

SWTSU will continue liaison with SPAG staff.

## SCHEDULE OF DELIVERABLES

| Phases | Start | Complete |
|---|---|---|
| **Phase I** Data verification | June 1, 2000 | July 31, 2000 |
| **Phase II** Collection of additional data | July 10, 2000 | February 28, 2001 |
| **Phase III** Data processing & Analysis | August 1, 2000 | March 16, 2001 |
| **Phase IV** Field Verification | November 1, 2000 | January 31, 2001 |
| **Phase V** Data Mapping / Attribute Files | November 30, 2000 | June 1, 2001 |
| **Phase VI** | June 1, 2001 | August 31, 2001 |